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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

MAILED

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Technology Center 2100

Application Number: 09/457,669
Filing Date: December 09, 1999
Appellant(s): MOTOYAMA, TETSURO

James J. Kulbaski (Reg. No. 34,648)
<u>For Appellant</u>

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1/17/2006 appealing from the Office action mailed 7/26/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal except from those set forth by appellant.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The statement of the status of claims contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1.   The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 52-54, 57-62, 64-65, 69, 76-79, 82-87, 89-90, 94 and 101 are rejected under 35

U.S.C. 103(a) as being unpatentable over Kraslavsky et. al. (US 6,889,263) (Kraslavsky hereafter) in

view of (US 6,003,070) Frantz and as further exemplified by Sekihata et. al (US 5,506,834).

Regarding claim 52, Kraslavsky a system/method (Fig. 1) comprising:

.an business office device (4) configured to connect via a network (6) to a monitoring device (14)

that monitors said business office device (col 9/lines 35-50), said business office device comprising:

a memory (114, 111 or 228) within said business office device storing status information thereof

(e.g. memory 111/110 inside the board within device (e.g. printer 4) of Fig. 4, and col 57/lines 48-50

installed within col 10/lines 27-30 also see abstract);

a communication interface within the business office device for transmitting an electronic mail

message containing a first portion of status information to the monitoring device, wherein the business

office device is a printer (abstract and col 10/lines 10-16);

the communication interface for transmitting using operating protocols at the application layer of

the protocol stack using TCP/IP layer for transmission over the LAN.

Specifically, software in the board within the printer comprises a plurality of application modules

and network protocol stacks, (col 12/lines 52-col 13/line 4), these application modules require that a

network protocol stack be loaded and functioning within the board (NEB) see col 13/line 34-36; the

embedded software permits peripheral status and control information over the LAN and insures that the

correct protocol stacks are available for each configured application (col 13/lines 46-col 14/line 4, 18-

22); the board is configured for multiprotocol network operations, namely, a combined Novell/UNIX

multiprotocol environment, the UNIX-compatible *operating protocols* (see 335, 336 and 337 of Fig. 11), more specifically, 335 and 336 comprise a *TCP/IP operating protocol stack* (or tower) by which UNIX-compatible *application programs* communicate to LAN bus 6 via LSL, the UNIX-compatible network application programs include a UNIX-compatible printer server such as CLPR, are designated at 337, (col 30/lines 5-30), the print server CLPR drives printer 4 via SCSI bus 102 as described above, used for communicating over the LAN (col 31/lines 19-47).

However, Kraslavsky does not explicitly teach that the messages are transmitted as Internet electronic mail messages.

Frantz teaches a system/method for monitoring any type of equipment from a plurality of equipments including a photocopier that monitors the amount of toner and paper, computer, and a printer (column 2, lines 15-31); an equipment (20) (business office devices) (col 2/lines 15-30) which is connected to monitoring device (terminal), col 4/lines 38-47, terminal col 2/lines 32-50) including

an email interface (10) for transmitting an electronic mail message "email" (col 4/lines 32-42) containing status information (col 8/lines 1-7) to a monitoring device (col 4/lines 56-64, status and/or error messages, col 5/lines 3-13, 28-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Frantz for transmitting status information from a monitored device to a monitoring device using electronic mail message because in doing so it would further implement in the Kraslavsky system an interface with electronic mail and terminal emulation capabilities configured to transmit status information selectively, at predetermined time, or event to multiple locations, as taught by Frantz. One would be motivated to implement Frantz teachings for sending and receiving standard email messages to any equipment because in doing so technicians could be allowed simultaneous access to the equipment, so that one technician doing a remote self-test and looking for failed hardware could be accessing the system at the same time as another technician that is upgrading portions of software, as discussed by Frantz.

One of ordinary skill in the art would recognize that message service protocols reside in the application layer of the protocol stack, and that these utilize the transport service protocols to transmit data packets over the network. As evidence that this was known at the time the invention was made, namely, Sekihata et. al. has been introduce to exemplify that the application layer provides a service for each user application, where for example, *electronic mail transfer functions* are defined, and *simple mail transfer protocol (SMTP) is the standardized protocol* for that respective function, as shown on Fig. 3 using the functions of the Internet protocol layer (column 7, lines 1-29). It would have been obvious to

one of ordinary skill in the art at the time the invention was made that Frantz's transmission of an electronic mail message over the Internet, transmits an electronic mail message over the Internet using an electronic mail protocol (e.g. SMTP) at the application layer and using the TCP/IP layer functions for transmitting an electronic mail message (e-mail) over the Internet according to the Internet structure protocol because in doing so readily adopted protocol for communication over the Internet can be implemented.

Regarding claim 53, an "direct connection mode-based" interface for transmitting to the monitoring device a second portion or first portion the status information (Kraslavsky: col 7/lines 55-63, col 14/lines 35-67, direct connection via a modem and communication line, col 7/lines 49-63).

Regarding claim 54, wherein the first "e-mail" interface and the second "direct connection-mode" interface can each transmit at least one of the first and second portions of the status information (Kraslavsky: col 18/lines 17-33, 46-59).

Regarding claim 76, Kraslavsky teaches a "business" system (Figs. 1-2) including the limitations discussed on claim 52, same rationale of rejection is application, and further, the business office device from a remote location (col 11/lines 62-col 12/line 5) or located remotely from the monitoring device (Figs. 1-2).

Regarding claim 77, this monitoring method claim, comprises substantially the same limitations discussed on claims 52 and 76, same rationale of rejection is applicable.

Regarding claim 101, this claim comprises the computer program product, comprising: a computer storage medium and a computer program code mechanism embedded in the computer storage medium for internally monitoring functions discussed on claims 52, 76-77, same rationale of rejection is applicable.

3.   Claims 55-56, 66-68, 70-75, 78-79, 80-81, 91-93, 95-100, 104-105, 115-117, and 119-124 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraslavsky-Frantz in view of Sekihata in further view of Tarr et. al. (US 5,184,179) (Tarr hereafter).

Regarding claim 55, the above-mentioned reference fails to teach wherein said transmission is at a predetermined (time) interval.

Tarr teaches a business office (52) device status information to a monitoring (54) device (col 3/lines 33-40, col 5/lines 2-30); the office device including a memory (504/506) for storing status information (Fig. 6) (col 3/lines 61-col 4/line 3 and col 4/lines 60-67); and

transmitting status information to the monitoring device at a predetermined interval (col 3/lines 33-40 and col 5/lines 2-30).

It would have been obvious to one ordinary skilled in the art at the time the invention was made given the suggestions of Kraslavsky for remotely monitoring and controlling peripheral device from a remote location, the teachings of Tarr for monitoring copiers would be readily apparent. One ordinary skilled would be motivated to automatically notify remotely located parties at appropriate time of status information of monitoring device, taught by Tarr, to enhance Kraslavsky upon request mechanism making it more automated.

Regarding claim 56, the business office device transmits the first portion of the status information to the monitoring device when an event occurs in the business office device (Tarr: co 6/line 55-col 7/line 3).

Regarding claim 57, wherein the one memory comprises a "semi-static" memory for storing an assigned name of the business office device (Kraslavsky: col 34/lines 12-16).

Regarding claim 58, wherein the assigned name is communicated to the monitoring device (Kraslavsky: col 33/lines 32-56).

Regarding claim 59, wherein the memory comprises a "semi-static" memory for storing an assigned address of the business office device (Kraslavsky: col 34/lines 12-16).

Regarding claim 60, wherein the assigned address (413 of Fig 9) is communicated to the monitoring device (Kraslavsky: col 28/lines 23-35).

Regarding claim 61, said first portion of the status information is transmitted based on a request received from the monitoring device (Kraslavsky: col 19/lines 36-53, col 20/lines 49-65).

Regarding claim 62, wherein the request is received via electronic message (Kraslavsky: col 10/lines 31-38).

Claim 63 (Canceled).

Regarding claim 64, wherein the one memory comprises a persistent "semi-static" memory for storing an "option" configuration information (Kraslavsky: col 10/lines 1-25, 58-62).

Regarding claim 65, wherein the one memory comprises a persistent "static" memory for storing a model (version) number (Kraslavsky: col 54/lines 13-23).

Regarding claims 66-68, wherein the at least one memory comprises a static memory for storing a serial number (Tarr: col 5/lines 30-47), and for storing characteristics of the device that do not change over a life of said business office device (e.g. its serial number discussed above) and a dynamic memory for storing dynamic data (Tarr: col 3/line 61-col 4/line 3).

Regarding claim 69, wherein the at least one memory comprises a dynamic memory for storing an indication of a paper tray present in the business office device (Kraslavsky: col 34/lines 42-51).

Regarding claims 70 and 74, wherein the memory comprises a dynamic memory for storing an indication of a voltage used in the business office device (Tarr: col 8/lines 56-67) and an indication of sensitivity of photoreceptor in the business office device (Tarr: col 5/line 60-col 3/line 2).

Regarding claims 71-73 and 75, a dynamic memory for storing an indication of a status of paper in a paper tray present in the business office device, an indication of a status of toner in the business office device (Tarr: col 3/lines 16-31, col 5/lines 60-col 6/line 2), an indication of consumable goods (e.g. oil), amount of toner, number of prints (Tarr: col 5/line 60-col 6/line 2)

Regarding claim 78, establishing a direct connection to the monitoring device (direct modem-telephone connection Tarr: col 3/lines 33-40, col 5/lines 2-30); and transmitting, across the direct connection, at least one of a second portion of the status information and the first portion of the status information (Tarr: col 11/lines 17-26).

Regarding claim 79, wherein the step of storing comprises storing the status information in a common memory such that both the first and second portions of the status information are read from the common

memory (Tarr: col 4/lines 4/line 60-col 5/line 8, diagnostic information stored in memory 28, col 7/lines 66-col 8/line 6, storing status information col 10/line 53-66).

Regarding claims 80-87, and 89-100, these comprise the monitoring method claims associated with the business office device discussed on claims 55-62, and 64-75, same rationale of rejection is applicable.

Claim 88 (Canceled).

Regarding claims 102-111 and 113-124, these claims are the computer program product, comprising a computer storage medium and the computer program code embedded in the computer storage medium for monitoring the business office device, the computer program code comprising the computer code configured to perform the functions/steps of the method discussed on claims 77-87 and 89-100, same rationale of rejection is applicable.

Claim 112 (Canceled).

(10) Response to Arguments

4.   Regarding claims 52-54, 57-62, 64-65, 69, 76-79, 82-87, 89-90, 94 and 101 are rejected under 102 as being anticipated by Kraslavsky, applicant has pointed to Board of Patent Appeals and Interference (the Board hereafter) decision (12/23/03), with respect to the claim clause "transmitting Internet electronic mail messages" as failing to be taught by Kraslavsky.

In response to the above-mentioned argument, applicant's remarks have been fully considered. The above rejection does not contravene the Board's determination as best understood.

However, the Board under the new grounds of Rejection in accordance with 37 CFR § 1 .196(b) entered a rejection under 102 as being anticipated by Kraslavsky. The Board sustained the following teachings with respect to the Kraslavsky reference.

Kraslavsky discloses a printer 4 (Fig. 1) on a local area network (LAN) 6. The printer includes a network expansion board (NEB) interfacing the printer to the LAN. The network .may use network software, such as Unix software, to effect communication over the various network members (column 4, lines 1-58). With use of the NEB, verbose amounts" of status information may be provided from the printer 4 to the LAN, including more than the simple "out of paper" and "off line" status messages that prior systems allowed (column 6, lines 18-62). Software on the network administrator's PC 14 allows

request of status information from the printer (column 14, lines 27-48). Software at the remote printer outputs the device status information in response (column 18, lines 34-59). *The communications may use TCP/IP protocol*, if the LAN is running a Unix operating system (column 18, line 60-column 19, line 4). As shown in Figure 5C, the network administrator may request detailed status information from the printer (or other peripheral device on the network, if equipped with an NEB), the status *information being transmitted* from the printer *through the LAN* to the administrator's PC 14 (column 20, line 49-column 21, line 15).

Kraslavsky thus discloses a monitoring device (PC 14) which determines information to be transmitted to a monitored device (printer 4), the information including a request for status of the printer determined using sensors within the printer, such as sensors that ascertain if the printer is off-line or out of paper. The transmission of status information through *"electronic mail"* in view of the broadest reasonable interpretation of "electronic mail," requires "the transmission of messages over a communications network - we find no difference between the relevant claim 10 requirement and the transmission of the PC 14 message to printer 4, over the LAN 6 using TCP/IP protocol within a Unix operating system, as disclosed by Kraslavsky. Our evaluation of the declaration does not convince us that the broadest reasonable interpretation of "electronic mail" requires an interpretation that excludes the electronic communications described by Kraslavsky.

Thus, [AS BEST UNDERSTOOD], the Board's decision with respect to Kraslavsky's teachings is that the reference teaches the transmission of electronic messages containing status information of the business office device, e.g. a printer, using a TCP/IP protocol to a monitoring device (opinion p. 8).

However, Kraslavsky does not teach [according to the Board] that the message(s) is/are transmitted as an Internet electronic mail message(s) (opinion, p. 3).

According to the above noted rejection applied to instant application, the deficiencies noted by the Board, are set forth by the office action and not contravening with it's determination. For this reason, the prior art of record Frantz has been introduced under new grounds of rejection.

Frantz teachings for monitoring a plurality of devices including photocopiers, printers and computers remotely over the Internet and obtaining status information associated with these devices using electronic mail messages (email), have been applied.

Specifically, Frantz teaches a system/method for monitoring a plurality of equipments including a photocopier for example for monitoring the amount of toner and paper, other equipments include a computer, and a printer (column 2, lines 15-31), where an equipment (20) (business office devices) (col

2/lines 15-30) which is connected to monitoring device (terminal), col 4/lines 38-47, terminal col 2/lines 32-50) includes

an email interface (10) for transmitting an electronic mail message (email) (col 4/lines 32-42) containing status information (col 8/lines 1-7) to a monitoring device (col 4/lines 56-64, status and/or error messages, col 5/lines 3-13, 28-39).

One of ordinary skill in the art would recognize that message service protocols reside in the application layer of the protocol stack, and that these utilize the transport service protocols to transmit data packets over the network. However, as evidence that this was known at the time the invention was made, namely, Sekihata et. al. has been introduce to exemplify that the application layer provides a service for each user application, where for example, *electronic mail transfer functions* are defined, and *simple mail transfer protocol (SMTP) is the standardized protocol* for that respective function, as shown on Fig. 3 using the functions of the Internet protocol layer (column 7, lines 1-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Frantz's transmission of an electronic mail message over the Internet, transmits an electronic mail message over the Internet using an electronic mail protocol (e.g. SMTP) at the application layer and using the TCP/IP layer functions for transmitting an electronic mail message (e-mail) over the Internet according to the Internet structure protocol because in doing so readily adopted protocol for communication over the Internet can be implemented.

9.   Regarding claims 52-54, 57-62, 64-65, 69, 76-79, 82-87, 89-90, 94 and 101 are rejected under 102 as being anticipated by Kraslavsky, applicant has pointed to Board of Patent Appeals and Interference (the Board hereafter) decision (12/23/03), with respect to the claim clause using an "Internet e-mail protocol", as failing to be taught by Kraslavsky.

In response to the above-mentioned argument, applicant's remarks have been fully considered. Frantz teaches an email interface (10) for transmitting an electronic mail message (email) (col 4/lines 32-42) containing status information (col 8/lines 1-7) to a monitoring device (col 4/lines 56-64, status messages, col 5/lines 3-13, 28-39) over the Internet.

Sekihata et. al. has been introduce to exemplify that the application layer provides a service for each user application, where for example, *electronic mail transfer functions* are defined, and *simple mail transfer protocol (SMTP) is the standardized protocol* for that respective function, as shown on Fig. 3 using the functions of the Internet protocol layer (column 7, lines 1-29) was known at the time the invention was made.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section **(9)** above.

Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the

following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new

ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by

filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any

amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that

complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be

reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in

37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR

41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply

brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence,

it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR

41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period

set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR

1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

BEATRIZ PRIETO
PRIMARY EXAMINER

A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:

For conferees see Pre-Brief Appeal Conference mailed 12/20/05.

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER
Conferee

GLENTON B. BURGESS
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Conferee